

ملخص

كيمياء عضوية (11)

لطلاب السنة التحضيرية بجامعة الملك خالد بأبها – المحالة

2015

عمل تطوعي طلابي

لا تنسى زيارة المدونة http://kku-a.blogspot.com

و نشر المدونة بين الطلاب لتعم الفائدة



(1) C — C

Homolytic clevage C–C Bond gives

a) electrophile b) nuclophile

c) Freeradicals d) a+b

ترجمة السؤال السابق

الكسر المتجانس للروابط C–C يعطي

a) باحث عن الالكترونات b) باحث عن الشحنة الموجبة

c) شقوق حرة d) (a+b)

Hetrolytic clevag C–C Bond gives

a) electrophile b) nuclophile

c) a+b d) Freeradicals

الكسر غير المتجانس للروابط C–C تعطي

أ- باحث عن الالكترونات

ب- " " الشحنة الموجبة

جـ- a+b

د- شقوق حرة

② Types of Reactions (2)

The Type of These reaction is

a) $CH_2 = CH_2 + H_2 \longrightarrow CH_3-CH_3$ حذف الرابطة
Addition اضافة

b) $CH_3\ CH-CH\ CH_3$ (Br Br) $\xrightarrow{Zn} CH_3CH=CH\ CH_3$ اضافة رابطة
elimination (حذف)

c) $CH_4 + Cl_2 \longrightarrow CH_3Cl + HCl$ Substitution احلال
$-C-H + Cl_2 \longrightarrow -C-Cl + HCl$

③ Reactions of Alkanes

Alkanes reacting with Free radical substitution

④ Combustion of Alkanes — احتراق

$CH_4 + O_2 \longrightarrow CO_2 + H_2O + E$

Combustion of methane gives

a) CO_2 b) H_2O c) a+b
d) none



Consider Chloraination of propane (3)

What is the type of Reaction

Free radicals substution

Ch_3

Cyclo alkane and Alkenes are Isomers

functional group Isomers

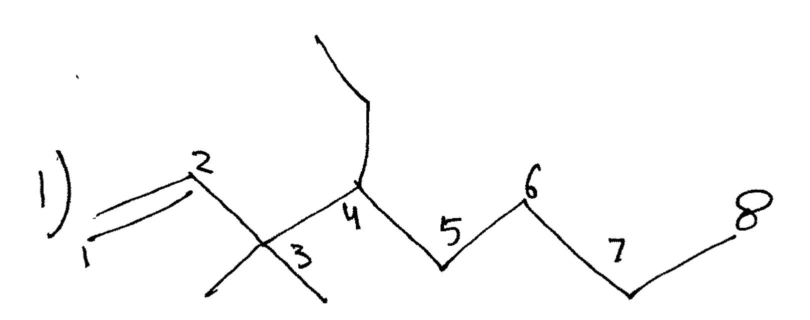
	△	C_nH_{2n}

Common — ylene

$CH_3-\overset{CH_3}{\overset{|}{C}}=CH_2$ Isobutylene

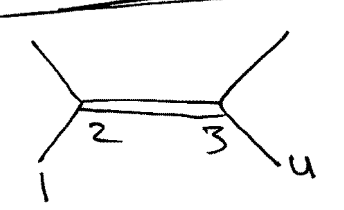


(4')

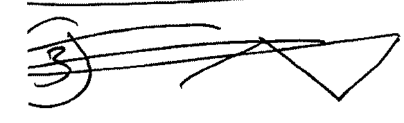


4-Ethyl-3,3-dimethyl-1-octene

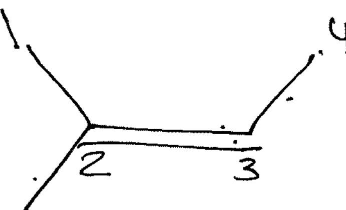




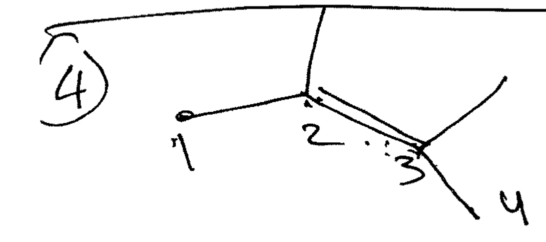
2,3-Dimethyl-2-butene



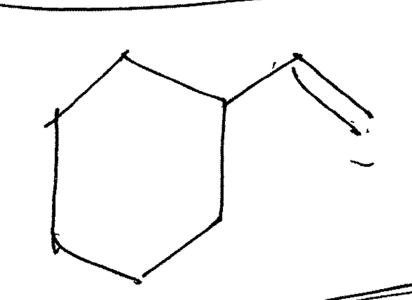




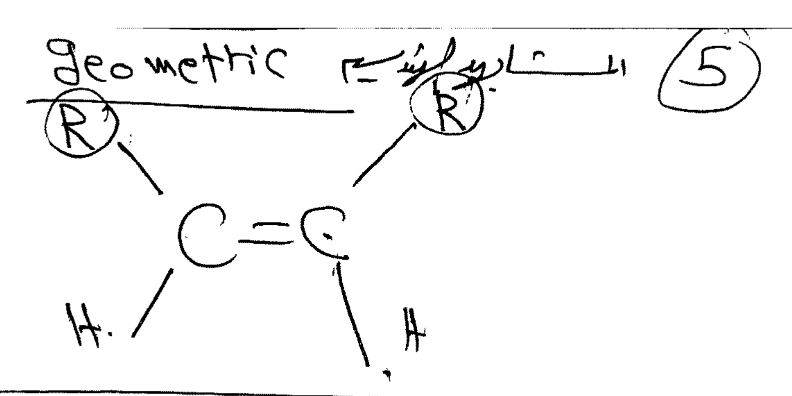
2-Methyl-2-butene



2,3-Dimethyl-2-buten

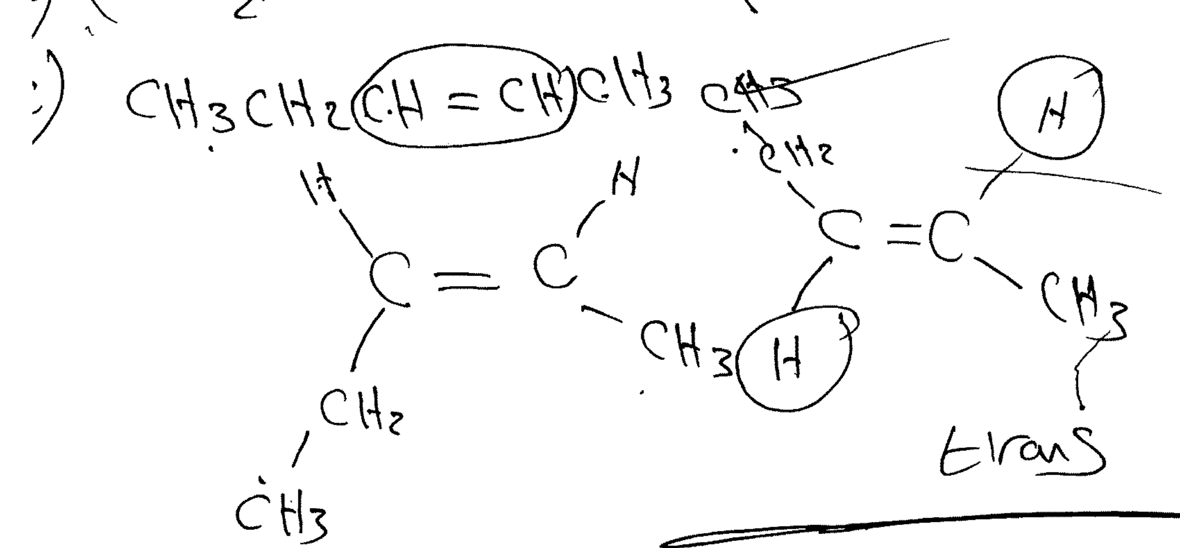


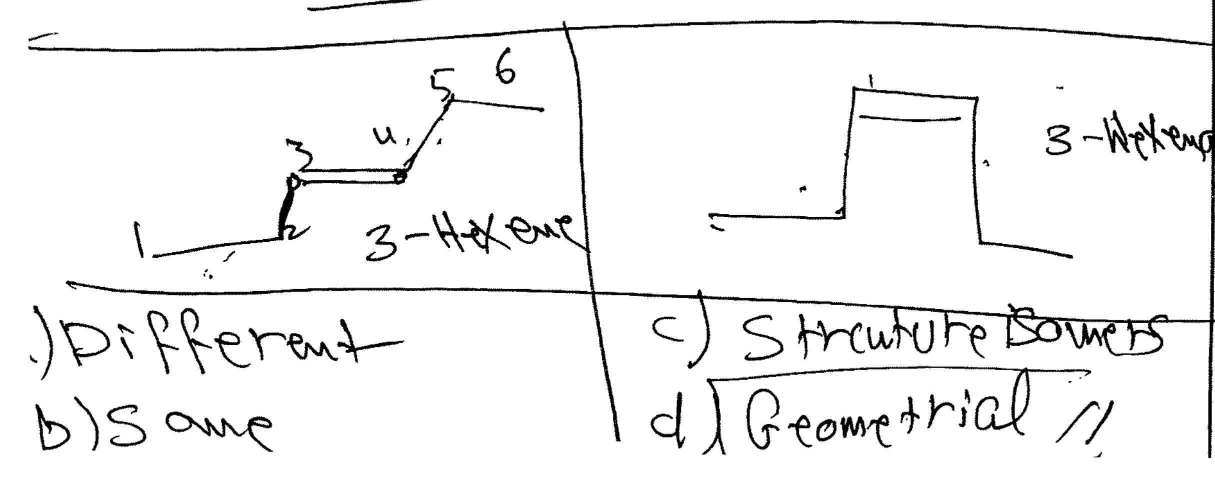
Ethenylcyclohexane

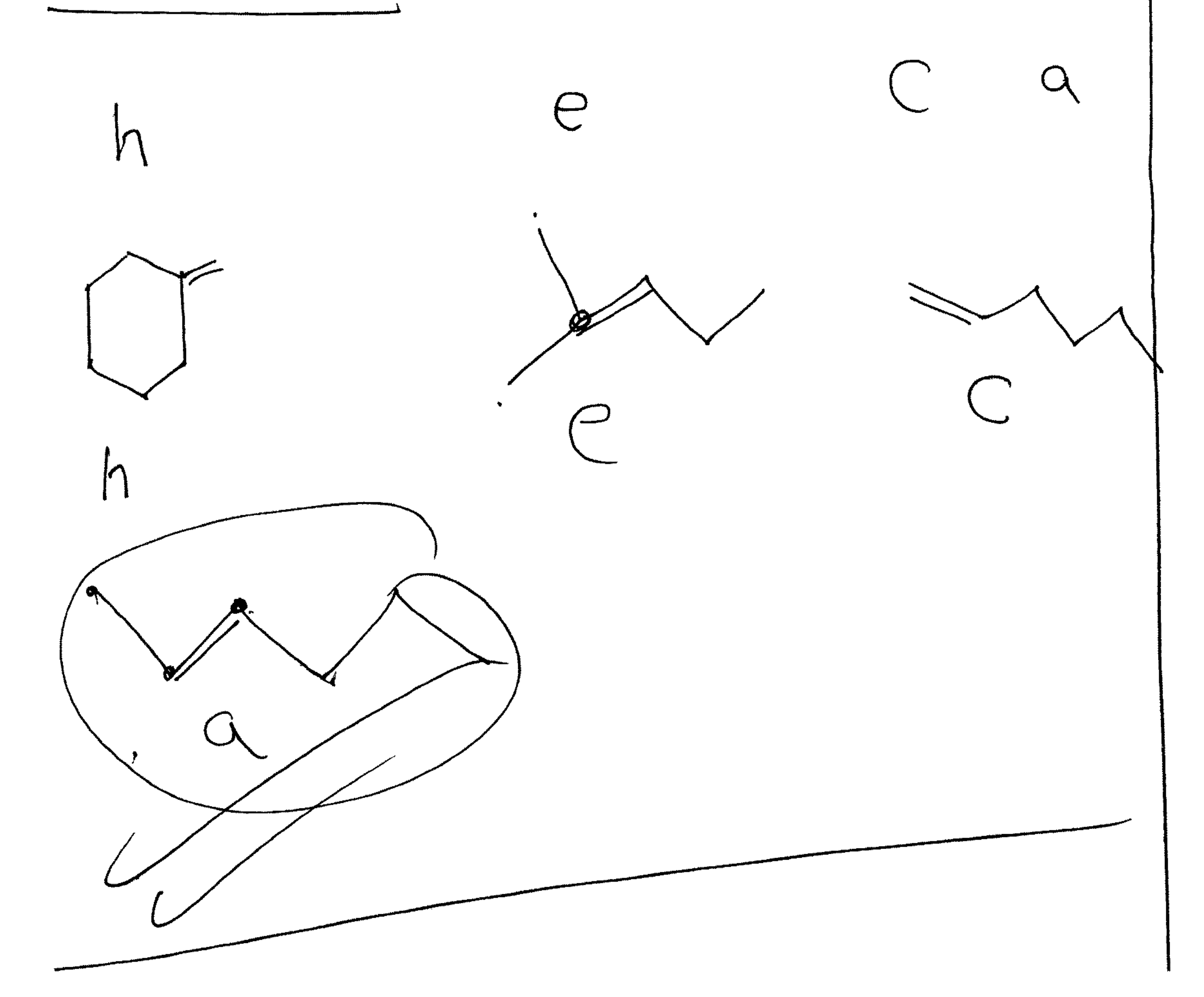


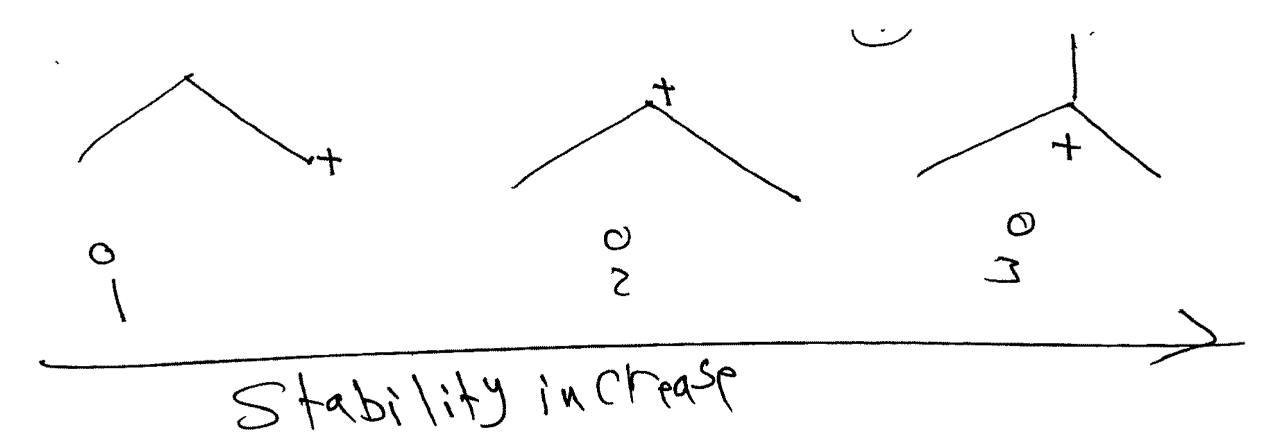
a) $CH_3CH=CH_2$ ✗

b) $(CH_3)_2C=CHCH_3$ ✗

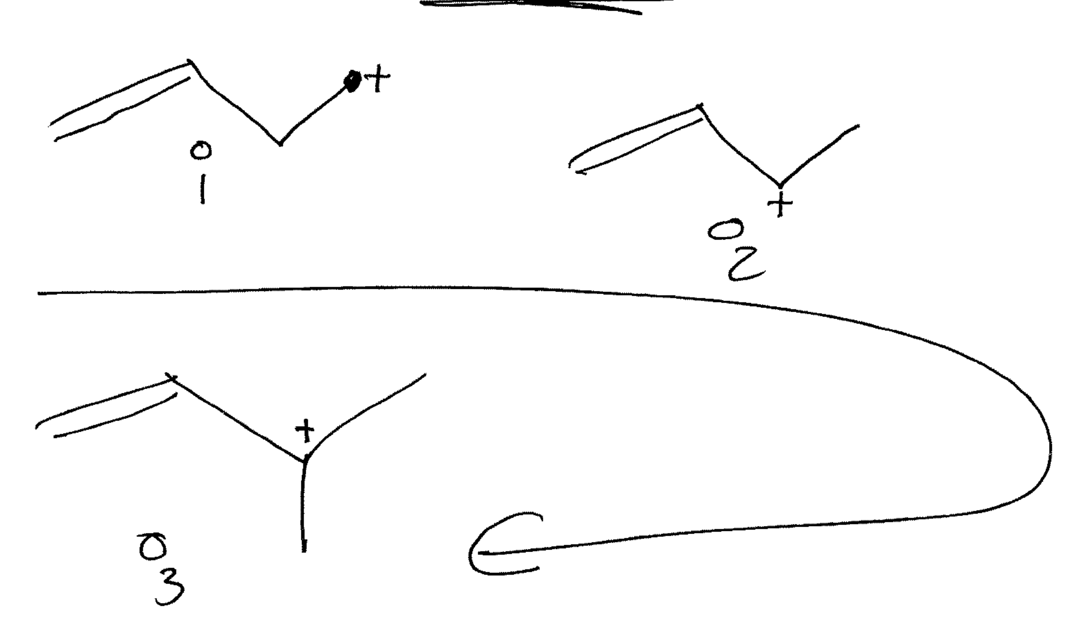


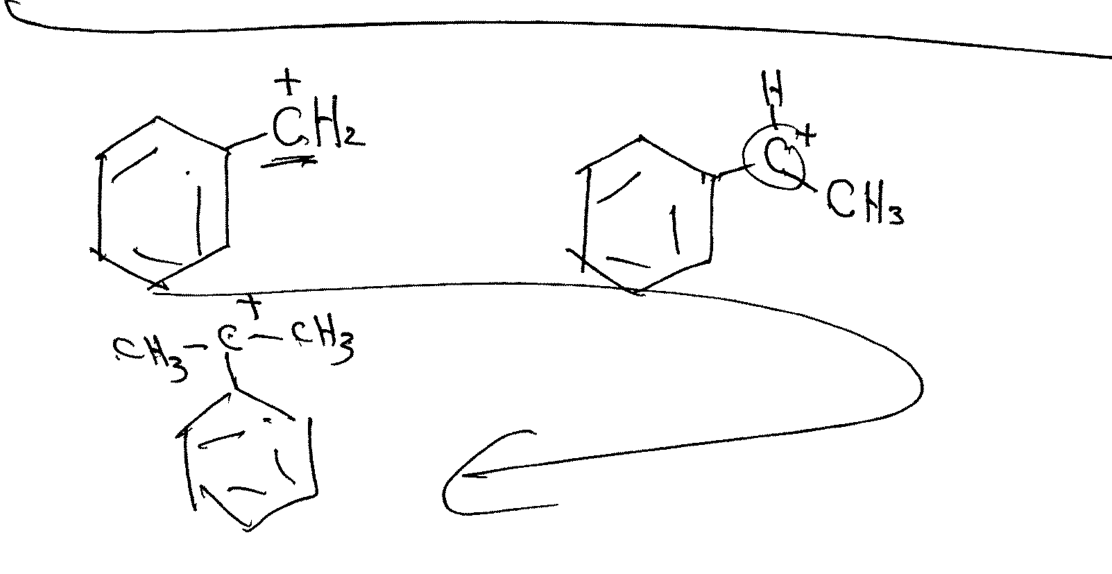


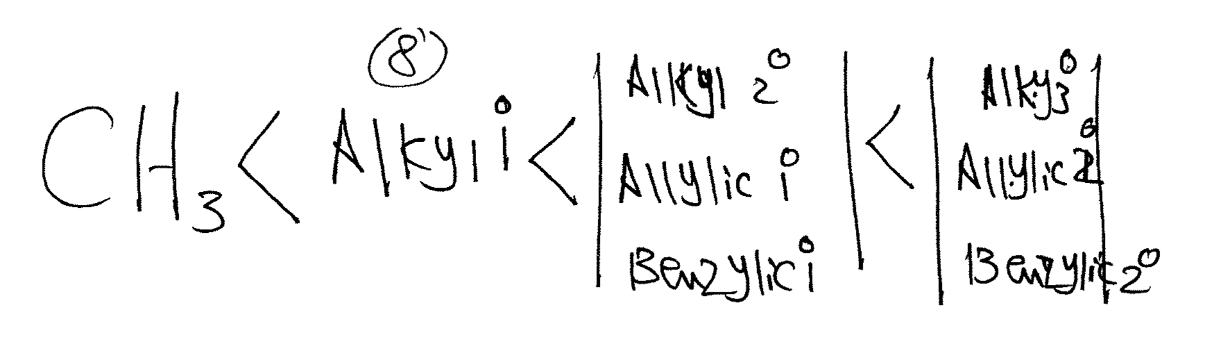

which of the above Compound may have Cis-tr
isomers
h
e
c
a
e
c
h
a
c



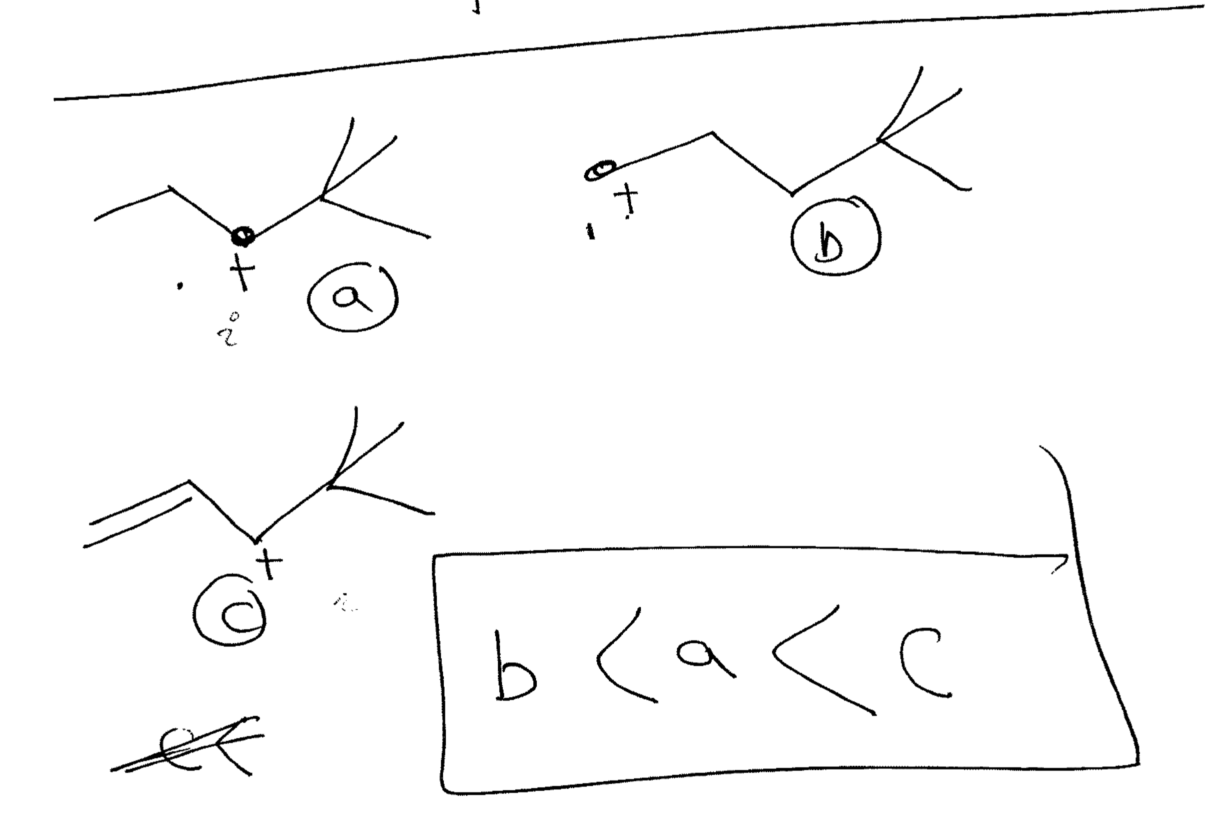
Allylic

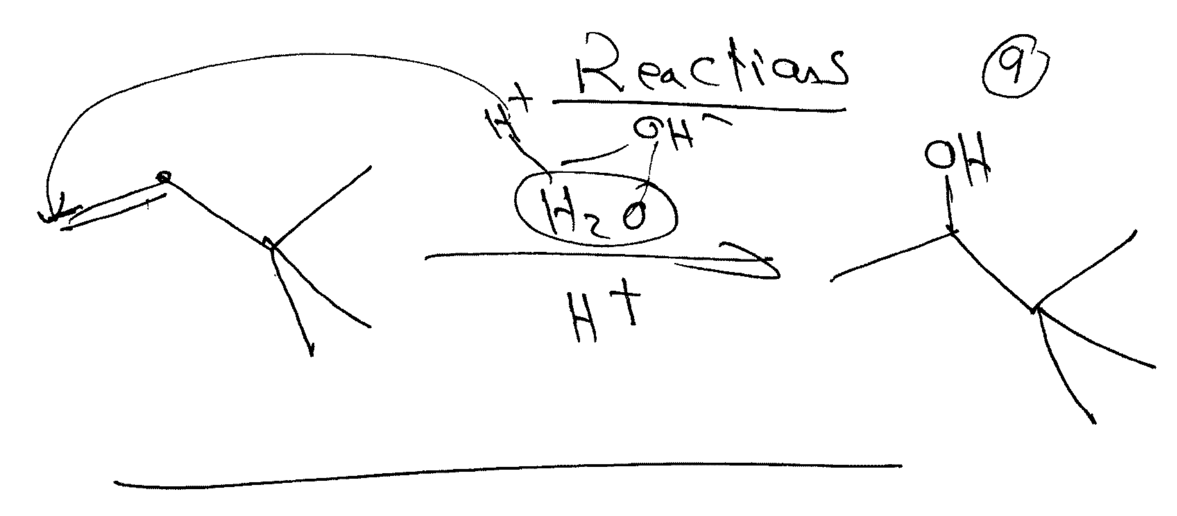


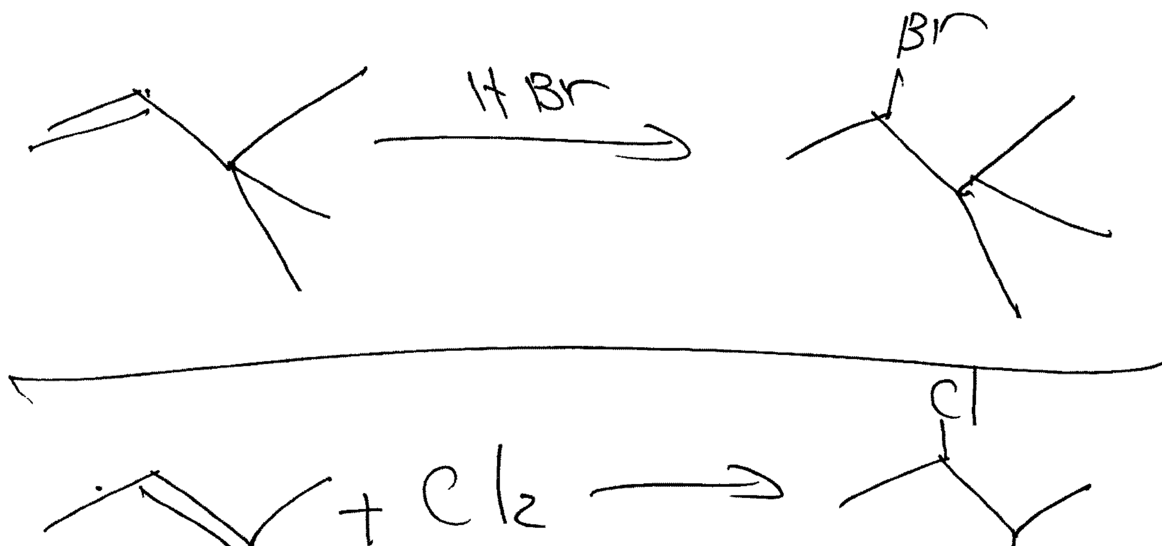




Allylic 3°
Benzylic 3°
<




Reactions
9
H^+
OH^-
H_2O
H^+
OH


HBr
Br
Cl_2
Cl
Cl


H_2

(10)

H^+ OH^-

H_2O / H_3O^+

OH

H^+ OH^-

H_2O

H^+

OH

متبادل Conjugeted

1 3 2 4

1,3-Butediene

none Conju

1,4-Pentadien (none Conjugated) غير متبادل

1 2 3 4

2 4 1 3

1,2-Butdien ~~Isolate~~

Commulated